

## **REMARKS**

### **Status of the Application**

In the Office Action, Claims 1-12 were rejected. In the present Response, claims 1, 3, 6, and 7 are amended so that claims 1-12 are pending.

Claim 1 has been amended for reasons unrelated to patentability. That is, claim 1 has been amended to expressly state that which would have been inherently understood from reading the claims in light of the specification. In addition, the words "only" and "at least" have been deleted from step c) wherein such terms were included in claim 1 by error and such error was only just now discovered. Support for the language that has been added to claim 1 can be found at page 1, line 1 to page 2, line 33. Support for the terms/phrases deleted from claim 1 can be found at page 8, lines 1-9. Applicants apologize for any inconvenience that the erroneously included claim language only just now being deleted has caused the Examiner.

Claims 3, 6 and 7 have been only been amended to accommodate the amendments to claim 1 and/or correct typographical errors.

No new matter has been added.

### **Rejection Under 35 U.S.C. §103**

Claims 1, 3-5 and 7-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,891,292 to Goodman in view of U.S. Patent No. 6,221,439 B1 to Negele. Claims 2 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Goodman in view of Negele and further in view of U.S. Patent No. 5,166,007 to Smith.

### **Claims 1, 3-5 and 7-12**

The Examiner asserts that "[s]ince Goodman teaches a thermosetting coating, cured by radiation, and Negele teaches heat or IR as members of the radiation class suitable for curing, Negele would have reasonably suggested the use of IR heat or other thermal source of curing in the method of Goodman", and therefore "it would have been obvious to one of ordinary skill in the art to use the teachings of Negele in the method of Goodman with the expectation of successful results since thermal and/or IR sources are suitable for radiation curing."

Specifically, the Examiner asserts that “Goodman teaches a repair method comprising providing a thermosetting repair coating to a removable, peel-ply backing in a partially cured, ‘tacky’ state.” The Examiner asserts that as “the repair coating is said to be ‘thermosetting’ and because it is rendered tacky, i.e. partially cured, by infrared heating, the coating is ‘thermally curable’ as required by the claim”. The Examiner also asserts that Goodman teaches at column 9, lines 38-68 that the “thermosetting repair coating is then applied directly to the damaged area and cured in place using radiation.” The Examiner further takes the position that “[w]hile Goodman does not specifically teach the removal of the backing film, ... the removable peel-ply backing is inherently removed, as such a backing is used merely for transporting and storing the repair patch material in a rolled form.” The Examiner further notes that although “Goodman does not specifically teach the use of thermal energy”, “Goodman does teach that the coating is thermosetting and that infrared heat is used to render it partly cured.” The Examiner also noted that “the curing applied is said to be ‘radiation curing’, a genus of which thermal, infrared heating is a member.” Finally, the Examiner indicates that “Negele is cited for teaching that infrared and thermal sources are members of the group of ‘radiation’ suitable for curing repair coatings.”

Applicants, however, respectfully disagree with the Examiner and reassert all of the arguments previously presented in the response filed on 3 February 2004. Indeed, the cloth-impregnated patch of Goodman, which Goodman also refers to as a “pre-preg” patch, is markedly different from the coated backing film of Applicants’ claimed invention.

Applicants point out that the process of the present invention is directed to a backing film coated on one side with a thermally-curable coating composition, wherein the coated side of such coated backing film is applied to the surface of the blemished area of the coating that is being repaired. The coating applied via the coated backing film is then cured so as to produce a repaired coating that is aesthetically pleasing.

Applicants respectfully assert that, in contrast to the Examiner’s assertions, a pre-peg patch is simply not designed to repair the coating on the surface of a substrate, but rather is actually being used to repair the composite out of which the substrate being repaired is made. In fact, Applicant’s claimed invention could, after

the pre-peg patch of Goodman is applied, be subsequently applied to such pre-peg patch to repair the coating of the article. Repairing the physical structure of an article is simply not the same as repairing the coating of the article. Goodman is directed to a process for repairing the structure of a substrate, and Applicants' claimed invention is directed to a process for repairing the surface coating that has been damaged on the substrate. Never the two shall meet. In light of the Examiner's assertion that the pre-peg patch of Goodman is repairing the coating at the same time as such patch is repairing the structure, Applicants respectfully request the Examiner to point to such a disclosure as Applicants have been unable to locate any such teaching or suggestion in Goodman.

Furthermore, Applicants respectfully assert that when the present application is read as a whole, it is inherently understood that the coating composition of Applicants' claimed invention does not contain fiber reinforcements. Logic dictates that an aesthetically pleasing coating having the market demanded level of smoothness, gloss, and optical faultlessness while also possessing the desired level of hardness and resistance to solvents, water and weathering is simply not achievable with a coating composition that contains a fiber reinforcement. On the contrary, a reasonable person would expect a coating composition containing a fiber reinforcement to be lumpy—not smooth, be aesthetically unpleasing, contain cracks, craters, pin holes, etc., be anything but optically faultless, and—as a result of all of the cracks, holes, etc.—not be resistant to weather, solvents, or water.

As a result, Applicants respectfully assert that Goodman fails either alone or in combination with Negel and in further combination with Smith to teach or suggest the coated backing film of Applicants' claimed invention because Goodman is directed to an impregnated cloth that 1) clearly has nothing to do with a coating, 2) is designed to repair the physical structure of an article and NOT the damaged surface coating of such article, 3) fails to teach or suggest anywhere therein that such impregnated cloth can be used to repair the damaged portion of a coating that has been previously applied to a substrate, and 4) a reasonable person would never logically believe could produce an aesthetically pleasing coating in accordance with the type of coating that Applicants have defined in the specification of their application. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

In addition, Applicants respectfully assert that the term “radiation curing” and “radiation curable” as used in Goodman teaches away from the use of thermal curing, and therefore is not combinable with Negele. Indeed, as the Examiner herself recognized Negele broadly defines “radiation” as including “infrared radiation, heat radiation, ultraviolet radiation and/or electron beam radiation.” Such a definition, however, clearly contradicts the meaning that not only Goodman attributes to the phrase “radiation curing”, but also the meaning that a person of ordinary skill in the art would attribute to such a phrase.

Specifically, Goodman indicates at column 1, lines 14-18 that when “radiation curing” is used “curing takes place very quickly, and at low temperatures compared to conventional thermal curing.” Goodman further indicates at column 1, lines 18-21 that the “lower temperatures made possible with radiation curing reduce residual mechanical stresses that accompany conventional thermal curing.” Both of these sentences incontrovertibly indicate that Goodman views radiation curing and thermal curing to be two separate curing methods. In addition, in contrast to the Examiner’s continued insistence that thermal radiation is a species of the “broad genus class of ‘radiation’”, Goodman makes it clear that “thermal curing” is simply NOT a species of “radiation curing”, but rather is a completely different curing method altogether. That is, the phrases “radiation curing”, “radiation curable”, “thermal curing” and “thermally-curable” have specific meanings to a person of ordinary skill in the art as recognized by Goodman, and cannot be haphazardly lumped into a general classification entitled “radiation”. A person of ordinary skill in the art—and indeed Goodman—simply do not view these phrases as being members of a genus entitled “radiation”

Moreover, Goodman indicates at column 2, lines 1-4 that “[a] major advantage of low-temperature curing processes such as radiation curing is a reduction in residual thermal stresses associated with conventional thermal curing methods.” This sentence clearly indicates, especially in light of the above referenced sentences, that Goodman views radiation curing to be superior to thermal curing, and again recognizes that thermal curing is not a species of radiation curing. In addition, it becomes evident upon reviewing Goodman as a whole that Goodman does not recognize thermal curing as an acceptable alternative for use in curing the radiation curable polymer network materials of his invention.

Moreover, while Applicants acknowledge that the resins of Goodman are thermosetting, Applicants respectfully disagree with the Examiner's assertion that "e-beam radiation" is simply a preferred form of "radiation" that does not exclude the use of other forms of "radiation", such other forms being defined in accordance with Negel. In contrast, Applicants respectfully assert that while e-beam radiation may be the preferred type of "radiation curing" being used by Goodman, the meaning of the term "radiation curing" that Goodman expressly uses, as already explained hereinabove, necessarily excludes the use of "thermal curing". As a result, Applicants respectfully assert that Negele is NOT combinable with Goodman because "radiation curing" and "radiation curable" do not mean "thermal curing" and/or "thermally curable". The phrases each have their own specific and distinct meaning, wherein neither includes the other.

Applicants, therefore, respectfully assert that the Examiner has failed to establish a prima facie case of obviousness because as Goodman identifies thermal curing as being inferior to radiation curing, Goodman teaches away from being combined with Negel, and therefore the Examiner has improperly combined the two references. Indeed, as the Examiner is aware, paragraph X.D.2. of Section 2145 of the MPEP teaches that "[i]t is improper to combine references where the references teach away from their combination." Accordingly, Applicants respectfully request that the Examiner withdraw all rejections predicated on the combination of Goodman and Negele.

### **Claims 2 and 6**

The Examiner asserts that "Goodman in view of Negele teach that which is disclosed above, but fail to teach supplying the heat through the backing film or supplying a backing film with a protective film also thereon." The Examiner, however, asserts that although "Goodman does not specify when his 'removable peel-ply' backing is removed", it would have been obvious to a person of ordinary skill in the art "in the absence of a showing of criticality... to apply heat before or after removal, interchangeably, so long as the backing material was heat stable." The Examiner further asserted that "[s]ince Goodman teaches application of radiation to cure a repair patch and Smith teaches application of such radiation through the backing layer of a multi-layer backing film, Smith would have reasonably



suggested supplying the IR radiation of Goodman in view of Negele through the backing film of their invention", and therefore "[i]t would have been obvious to one of ordinary skill in the art, using the teachings of Smith, to radiate the coating through the backing film with the expectation of successful results because other similar repair methods are successfully operated in such a manner."

In light of the arguments presented hereinabove, Applicants respectfully assert that as Claims 2 and 6 depend from Claim 1, claims 2 and 6 are patentable as they currently stand. As a result, Applicants respectfully request that the Examiner withdraw this rejection and allow the case.

If, however, the Examiner continues to assert that Goodman and Negele render claim 1 obvious, Applicants respectfully reassert all of the arguments previously presented in the response filed on 3 February 2004.

#### **SUMMARY**

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and therefore respectfully solicit a Notice of Allowance. In order to expedite disposition of the case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due that is unaccounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

By: 

Hilmar L. Fricke  
Attorney for Applicants  
Reg. No.: 22,384  
Telephone: (302) 984-6058  
Facsimile: (302) 658-1192

Date: October 14, 2004